

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007528**Date Inspected:** 18-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng, Liu Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

Outside Yard at Vertical Mill:

The QA Inspector randomly observed the vertical mill was idle and that there was no milling being performed on the longitudinal stiffeners and skin plates on Lift 1 East Tower Shaft or Lift 2 East Tower Shaft at this time.

The QA Inspector randomly observed that no contract work was being performed in the interiors or on the exteriors of Lift 1 East Tower Shaft, Lift 2 East Tower Shaft or Lift 2 South Tower Shaft.

Heavy Equipment Shop Bay 10:

The QA Inspector randomly observed 2 ZPMC helpers utilizing angle grinders to blend the cover pass on the long seam between Skin Plates D and E on Lift 2 North Tower Shaft.

Heavy Equipment Shop Bay 11:

The QA Inspector randomly observed ZPMC welders ID 202821 and ID 066155, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2G (Horizontal Groove) Position with ZPMC WPS WPS-B-T-2232-TC-U2-F to

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weld the long seam on either side of the lower jig ring on Lift 2 West between Skin Plates C and D. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Zheng Ming Ye ID 066155, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-B-T-2132 to weld the triangle plates to the diagonal plates for Lift 1 West Tower Shaft at Weld Joint (WJ) WSD1-TL6E/D-149. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements. The attached photographs provide additional detail.

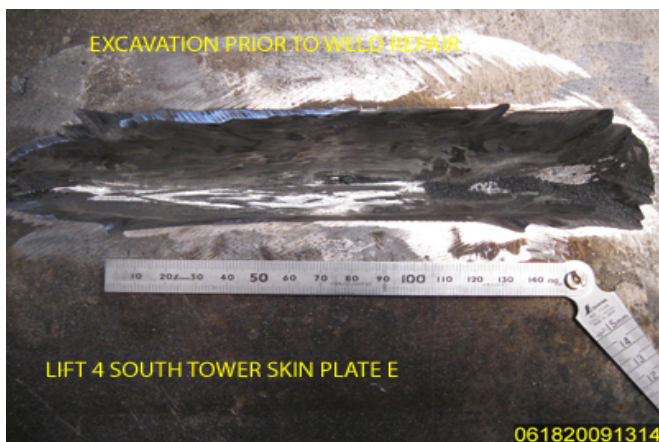
The QA Inspector randomly observed ZPMC Non Destructive Testing (NDT) Technicians utilizing the Ultrasonic Testing (UT) Method to inspect the soundness of the butt seam welds in the 120 millimeter (mm) thick South Tower Shaft Base Plate at WJ's WSD1-A423B/H-63B, 78B and 97B. There appeared to be no indications and ZPMC Quality Control (QC) accepted the above listed welds.

The QA Inspector randomly observed ZPMC welding personnel utilizing hand held gas torches to perform heat straightening operations per ZPMC Heat Straightening Request HSR1(T)-9234 to reduce weld induced distortion in the 120 mm thick West Tower Shaft Base Plate at WJ's WSD1-A423B/H-63B, 78B and 97B. The QA Inspector randomly observed ZPMC QC monitoring parameters.

The QA Inspector randomly observed 1 ZPMC helper utilizing an angle grinder to clean up slag in an area in WJ SSD1-FESA4-1A/F-10B on Lift 4 South Skin Plate E; which was previously excavated with Carbon Air Arc Gouging. The attached photographs provide additional detail.

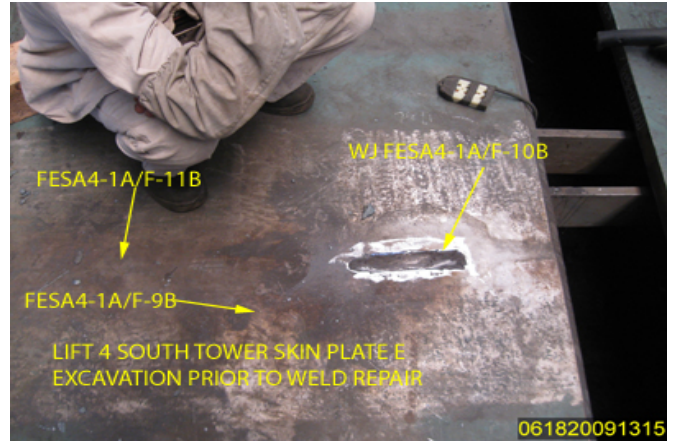
The QA Inspector performed a 100% Visual Testing (VT) Inspection of the welds attaching the fit lugs to 56M Diaphragm on Skin Plates D and E 56M Diaphragm to Skin Plate D and E on Lift 2 West per ZPMC NDT Notification Sheet 003461. The QA Inspector observed 1 area in a cope which required grinding. ZPMC welding personnel re-worked that 1 area during the VT Inspection. There appeared to be no indications after the re-work and the QA Inspector accepted the above listed welds.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
